UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SR-6J

August 21, 1997
FPD09715

Mr. Joseph Benedict
Forest Preserve District of DuPage County
P.O. Box 2339
Glen Ellyn, IL 60138

RE: Revised Predesign Report

Dear Mr. Benedict:

The U.S. Environmental Protection Agency and the Illinois Environmental Protection Agency (the Agencies) have reviewed the Revised Predesign Report dated July 25, 1997, submitted by Montgomery Watson.

The revision adequately addresses the Agencies comments and should be considered approved with two amplifications. First, the water level measurements required for an accurate water table map should initially include more than just a few locations. With the addition of the new wells, it is appropriate to complete an initial, comprehensive, baseline water level survey with sufficient duration to show seasonal fluctuation. Once the current water table map is established, a less comprehensive long-term water level measurement program can be implemented.

The second area of amplification involves the last bullet on page F-1 and the second bullet on page F-2 which describe an evaluation of the remedy through natural attenuation. For an accurate evaluation of natural attenuation, three lines of evidence are required. The first line of evidence is a reduction in the contaminant parent compound. This would be easily identified through the routine ground water analysis, corrected by a comparison to conservative tracers to normalize for dilution and sorption (i.e., chloride analysis). The second required line of evidence is the presence of daughter compounds and co-metabolites. This may also be achieved through the routine ground water chemical analysis, depending upon the co-metabolites. The third line of evidence is an evaluation of the presence of terminal electron acceptors such as oxygen, nitrate, sulfate, iron, manganese, methane and the presence of organic carbon. This information is used to calculate an assimilative capacity, mass balance and first-order rate constant. Once these calculations are made, projections regarding natural attenuation can be made and compared to actual field conditions. It is not necessarily mandatory that all three lines of evidence are compelling individually, due to the number of potential confounding factors, but that the weight of evidence of the three are compelling. These additional analyses and calculations are required

for an accurate evaluation of natural attenuation.

If you have questions regarding this letter or would like to discuss it in greater detail, please contact me at (312) 353-6425 and we can set up a conference call with Rick Lanham of IEPA.

Sincerely,

Michael E. Bellot
USEPA Remedial Project Manager

cc: Rick Lanham, IEPA
Jerry Hartwig, FPD
Peter Vagt, MW
Kostas Dovantzis, PRC